

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-14 (Canceled):

Claim 15 (Currently Amended): A process for preparing at least one olefin having from 8 to 12 carbon atoms from at least one olefin having from 4 to 6 carbon atoms ~~by means of a four-stage synthesis~~, which comprises

a) hydroformylating at least one starting olefin having from 4 to 6 carbon atoms to obtain at least one aldehyde product;

b) hydrogenating the at least one aldehyde ~~obtained in step a)~~ product to form ~~[[the]]~~ at least one corresponding alcohol;

c) dehydrating the at least one corresponding alcohol to produce ~~preparing~~ at least one 1-olefin by elimination of water from the at least one corresponding alcohol ~~obtained in step b)~~; and

d) obtaining at least one olefin by metathesis reaction with elimination of ethylene from the at least one 1-olefin(s) ~~obtained in step c)~~.

Claim 16 (Previously Presented): The process as claimed in claim 15, wherein said starting olefin is a mixture of olefins having from 4 to 6 carbon atoms, thereby producing a mixture of olefins having from 8 to 12 carbon atoms.

Claim 17 (Currently Amended): The process as claimed in claim 15, wherein the ~~hydroformylation reaction~~ hydroformylating is conducted in the presence of a catalyst comprised of rhodium and a triorganophosphorus compound.

Claim 18 (Currently Amended): The process as claimed in claim 15, wherein the ~~hydroformylation reaction~~ hydroformylating is conducted at a temperature ranging from 70 to 150° C.

Claim 19 (Currently Amended): The process as claimed in claim 15, wherein the ~~hydrogenation of aldehyde in step b)~~ hydrogenating is conducted in the presence of a catalyst of nickel, copper, copper/nickel, copper/chromium, copper/chromium/nickel, zinc/chromium or nickel/molybdenum.

Claim 20 (Currently Amended): The process as claimed in claim 15, wherein the ~~hydrogenation of aldehyde in step b)~~ hydrogenating is conducted under a gas phase total pressure 0.5 to 50 MPa.

Claim 21 (Currently Amended): The process as claimed in claim 15, wherein the ~~hydrogenation of aldehyde in step b)~~ hydrogenating is conducted at a temperature of 120 to 230° C.

Claim 22 (Currently Amended): The process as claimed in claim 15, wherein the ~~dehydration of the alcohol product of step b)~~ dehydrating is conducted over a fixed-bed catalyst of an oxide of an alkaline earth metal, of aluminum, of indium, of gallium, of silicon, of scandium, of yttrium, of lanthanum, of titanium, of zirconium, of thorium or of a rare earth metal.

Claim 23 (Currently Amended): The process as claimed in claim 22, wherein the ~~dehydration of the alcohol product of step b)~~ dehydrating is conducted over a fixed-bed catalyst of γ -aluminum oxide having a BET surface area 80 to 350 m²/g.

Claim 24 (Currently Amended): The process as claimed in claim 15, wherein the ~~dehydration of the alcohol product of step b)~~ dehydrating is conducted at a temperature ranging from 200 to 500° C.

Claim 25 (Currently Amended): The process as claimed in claim 15, wherein the ~~elimination of water in the third process step e)~~ dehydrating is conducted continuously over a solid catalyst which consists formally of aluminum oxide and barium oxide.

Claim 26 (Previously Presented): The process as claimed in claim 15, wherein said metathesis reaction is conducted over a rhenium catalyst comprising Re₂O₇ on γ -Al₂O₃ or on mixed support material selected from the group consisting of SiO₂/Al₂O₃, B₂O₃/SiO₂/Al₂O₃ and Fe₂O₃/Al₂O₃.

Claim 27 (Currently Amended): The process as claimed in claim 16, wherein a ~~hydrocarbon starting material of step a)~~ the starting olefin comprises isobutene and linear butenes.

Claim 28 (Currently Amended): The process as claimed in claim 16, wherein ~~said starting hydrocarbon material of step a)~~ the starting olefin is a C₄ fraction selected from the group consisting of raffinate I, a selectively hydrogenated C₄ fraction from a cracker, C₄ fractions from FCC plants [[or]] and C₄-olefins prepared by the Fischer-Tropsch synthesis.

Claim 29 (Previously Presented): The process as claimed in claim 28, wherein said C₄ fraction is an industrial C₄ fraction having an isobutene content of greater than 3 % by weight.

Claim 30 (Currently Amended): The process as claimed in claim 27, wherein 3-methyl-1-butene is separated from the 1-olefin fraction comprising olefins having 5 carbon atoms which is obtained after ~~process-step e)~~ the dehydrating.

Claim 31 (New): The process as claimed in claim 27, further comprising adding a stream of the 1-olefin to said metathesis reaction, wherein the 1-olefin consists essentially of 1-pentene and 2-methyl-1-butene in a ratio of from 1000:1 to 10000:1.